

CLAIMS

What is claimed is:

1. An apparatus for dispensing a measured portion of liquid from a
5 container with an opening, the apparatus comprising:
 - (a) a measuring chamber including an inlet connected to the opening of the container;
 - (b) a cap member rotatably attached to the measuring chamber, the cap member including a dispensing outlet and a fill level member; and
 - 10 (c) a liquid delivery member in fluid communication with the measuring chamber and the container, the fill level member operatively associated with the liquid delivery member to deliver liquid from the container to the measuring chamber, wherein a volume of liquid equal to the measured portion is retained therein from flowing back into the
15 container by the fill level member, the measured portion of liquid available for dispensing from the dispensing outlet.
2. The apparatus for dispensing a measured portion of liquid of claim 1,
wherein the liquid delivery member comprises a cylindrical C-shaped member
20 having a central slot and an annular channel there through, the slot and the annular channel in fluid communication with the container.

3. The apparatus for dispensing a measured portion of liquid of claim 2,
wherein the central slot extends axially the length of the liquid delivery member.
4. The apparatus for dispensing a measured portion of liquid of claim 2,
5 further including a dip tube member with a first end sealingly secured to the
measuring chamber inlet, the dip tube member with a second end extending into
the container.
5. The apparatus for dispensing a measured portion of liquid of claim 1,
10 wherein the fill level member comprises a cylindrical tube member co-axial with
the liquid delivery member and exterior thereto, the cylindrical tube member
secured at one end to the cap member, and extending the length of the liquid
delivery member.
- 15 6. The apparatus for dispensing a measured portion of liquid of claim 5,
wherein the cylindrical tube member includes a plurality of vertically non-aligned
apertures therein, each aperture alignable with the central slot of the liquid
delivery member.
- 20 7. The apparatus for dispensing a measured portion of liquid of claim 6,
wherein the cylindrical tube member includes a notch at an end opposite the cap
member, the notch vertically non-aligned with the non-aligned apertures therein,
the notch alignable with the central slot of the liquid delivery member.

8. The apparatus for dispensing a measured portion of liquid of claim 6,
wherein the apertures are circular.
- 5 9. The apparatus for dispensing a measured portion of liquid of claim 1,
further including a burp valve member secured in the cap member.
- 10 10. The apparatus for dispensing a measured portion of liquid of claim 9,
wherein the burp valve member is positioned interior the fill level member and
the valve member is in fluid communication with the annular channel of the
cylindrical C-shaped member.
- 15 11. The apparatus for dispensing a measured portion of liquid of claim 9,
wherein the burp valve member comprises a disk member with a first air vent
aperture in communication with the annular channel of the cylindrical C-shaped
member, the disk member held in a constant orientation on the cylindrical C-
shaped member, the cap member including a second air vent aperture alignable
with the first air vent aperture of the disk member.
- 20 12. The apparatus for dispensing a measured portion of liquid of claim 11,
wherein the notch in the fill level cylindrical member is aligned with the central
slot of the liquid delivery C-shaped member concurrent with alignment of the
burp valve air aperture and the cap member air vent aperture.

13. The apparatus for dispensing a measured portion of liquid of claim 1,
further including a tab member secured to the cap member, the tab member
providing an indication of alignment of each fill level member aperture and notch
5 with the central slot of the liquid delivery member, upon rotation of the cap
member.

14. The apparatus for dispensing a measured portion of liquid of claim 13,
wherein the tab member is exterior the measuring chamber.

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15. The apparatus for dispensing a measured portion of liquid of claim 14,
wherein the tab member includes a tab bump, and the measuring chamber
includes a plurality of surface depressions for engaging the tab bump, whereby
rotating the cap member to engage the tab bump with a selected surface
15 depression aligns an associated fill level member aperture or notch with the
central slot of the liquid delivery member.

16. An apparatus for dispensing a measured portion of liquid from a container
with an opening, the apparatus comprising:

20 (a) a measuring chamber including an inlet connected to the opening
of the container;

(b) a cap member rotatably attached to the measuring chamber, the
cap member including a dispensing outlet and a fill level member

including a cylindrical tube member secured at one end to the cap member; and

(c) a liquid delivery member in fluid communication with the measuring chamber and the container, the liquid delivery member comprising a cylindrical C-shaped member having a central slot and an annular channel there through, the slot and the annular channel in fluid communication with the container, the fill level member operatively associated with the liquid delivery member to deliver liquid from the container to the measuring chamber, wherein a volume of liquid equal to the measured portion is retained therein from flowing back into the container by the fill level member, the measured portion of liquid available for dispensing from the dispensing outlet.

17. The apparatus for dispensing a measured portion of liquid of claim 16, wherein the central slot extends axially the length of the liquid delivery member.

18. The apparatus for dispensing a measured portion of liquid of claim 16, further including a dip tube member with a first end sealingly secured to the measuring chamber inlet, the dip tube member with a second end extending into the container.

19. The apparatus for dispensing a measured portion of liquid of claim 16,
wherein the cylindrical fill level member is coaxial with the cylindrical C-shaped
liquid delivery member, extends the length of the liquid delivery member, and is
exterior thereto.

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20. The apparatus for dispensing a measured portion of liquid of claim 16,
wherein the cylindrical tube member includes a plurality of vertically non-aligned
apertures therein, each aperture alignable with the central slot of the liquid
delivery member.

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21. The apparatus for dispensing a measured portion of liquid of claim 20,
wherein the cylindrical tube member includes a notch at an end opposite the cap
member, the notch vertically non-aligned with the non-aligned apertures therein,
the notch alignable with the central slot of the liquid delivery member.

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22. The apparatus for dispensing a measured portion of liquid of claim 20,
wherein the apertures are circular.

23. The apparatus for dispensing a measured portion of liquid of claim 16,
further including a burp valve member secured in the cap member.

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24. The apparatus for dispensing a measured portion of liquid of claim 23,
wherein the burp valve member is positioned interior the fill level member and
the valve member is in fluid communication with the annular channel of the
5 cylindrical C-shaped member.

25. The apparatus for dispensing a measured portion of liquid of claim 23,
wherein the burp valve member comprises a disk member with a first air vent
aperture in communication with the annular channel of the cylindrical C-shaped
10 member, the disk member held in a constant orientation on the cylindrical C-
shaped member, the cap member including a second air vent aperture alignable
with the first air vent aperture of the disk member.

26. The apparatus for dispensing a measured portion of liquid of claim 25,
15 wherein the notch in the fill level cylindrical member is aligned with the central
slot of the liquid delivery C-shaped member concurrent with alignment of the
burp valve air aperture and the cap member air vent aperture.

27. The apparatus for dispensing a measured portion of liquid of claim 16,
20 further including a tab member secured to the cap member, the tab member
providing an indication of alignment of each fill level member aperture and notch
with the central slot of the liquid delivery cylindrical C-shaped member, upon
rotation of the cap member.

28. The apparatus for dispensing a measured portion of liquid of claim 27,
wherein the tab member is exterior the measuring chamber.

5 29. The apparatus for dispensing a measured portion of liquid of claim 28,
wherein the tab member includes a tab bump, and the measuring chamber
includes a plurality of surface depressions for engaging the tab bump, whereby
rotating the cap member to engage the tab bump with a selected surface
depression aligns an associated fill level member aperture or notch with the
10 central slot of the liquid delivery member.

30. An apparatus for dispensing a measured portion of liquid from a container
with an opening, the apparatus comprising:

- 15 (a) a measuring chamber including an inlet connected to the opening of the
container;
- (b) a cap member rotatably attached to the measuring chamber, the cap
member including a dispensing outlet and a fill level member including a
cylindrical tube member secured at one end to the cap member, the
cylindrical fill level member including a plurality of vertically non-
20 aligned apertures and a vertically non-aligned notch at an end opposite the
cap member, the cap member including a tab member providing an
indication of alignment of each fill level member aperture and notch upon
rotation of the cap member;

- (c) a liquid delivery member in fluid communication with the measuring chamber and the container, the liquid delivery member comprising a cylindrical C-shaped member having a central slot and an annular channel there through, the slot and the annular channel in fluid communication with the container, the fill level member operatively associated with the liquid delivery member to deliver liquid from the container to the measuring chamber;
- (d) a dip tube member with a first end sealingly secured to the measuring chamber inlet, the dip tube member with a second end extending into the container; and
- (e) a burp valve member positioned interior the fill level member of the cap member, the burp valve member in fluid communication with the annular channel of the cylindrical C-shaped member, wherein a volume of liquid equal to the measured portion is retained therein from flowing back into the container by the fill level member, the measured portion of liquid available for dispensing from the dispensing outlet.

31. The apparatus for dispensing a measured portion of liquid of claim 30, wherein the central slot extends axially the length of the liquid delivery member.

32. The apparatus for dispensing a measured portion of liquid of claim 30, wherein the cylindrical fill level member is coaxial with the cylindrical C-shaped liquid delivery member, extends the length of the liquid delivery member, and is exterior thereto.

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33. The apparatus for dispensing a measured portion of liquid of claim 30, wherein the apertures are circular.

34. The apparatus for dispensing a measured portion of liquid of claim 30, wherein the burp valve member comprises a disk member with a first air vent aperture in communication with the annular channel of the cylindrical C-shaped member, the disk member held in a constant orientation on the cylindrical C-shaped member, the cap member including a second air vent aperture alignable with the first air vent aperture of the disk member.

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35. The apparatus for dispensing a measured portion of liquid of claim 34, wherein the notch in the fill level cylindrical member is aligned with the central slot of the liquid delivery C-shaped member concurrent with alignment of the burp valve first air vent aperture and the cap member second air vent aperture.

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36. The apparatus for dispensing a measured portion of liquid of claim 30, wherein the tab member is exterior the measuring chamber.

37. The apparatus for dispensing a measured portion of liquid of claim 36, wherein the tab member includes a tab bump, and the measuring chamber includes a plurality of surface depressions for engaging the tab bump, whereby
5 rotating the cap member to engage the tab bump with a selected surface depression aligns an associated fill level member aperture or notch with the central slot of the liquid delivery member.

38. A method for measuring and dispensing a measured portion of liquid from
10 a container with an opening, the method comprising the steps:

(b) supplying a measuring and dispensing apparatus comprising:

- (i) a measuring chamber including an inlet connected to the opening of the container;
- (ii) a cap member rotatably attached to the measuring chamber, the
15 cap member including a dispensing outlet and a fill level member; and
- (iii) a liquid delivery member in fluid communication with the measuring chamber and the container, the fill level member operatively associated with the liquid delivery member to
20 deliver liquid from the container to the measuring chamber, wherein a volume of liquid equal to the measured portion is retained in the measuring chamber from flowing back into the container by the fill level member;

- (g) securing the measuring and dispensing apparatus to the opening of the container;
- (h) orienting the container and attached apparatus vertically with the apparatus above the container;
- 5 (i) compressing the container to deliver liquid from the container to the measuring chamber;
- (j) releasing compression on the container to drain liquid in excess of the measured portion from the measuring chamber; and
- (k) inverting the container and attached apparatus to dispense the measured
10 portion of liquid from the measuring chamber via the dispensing outlet in the cap member.